

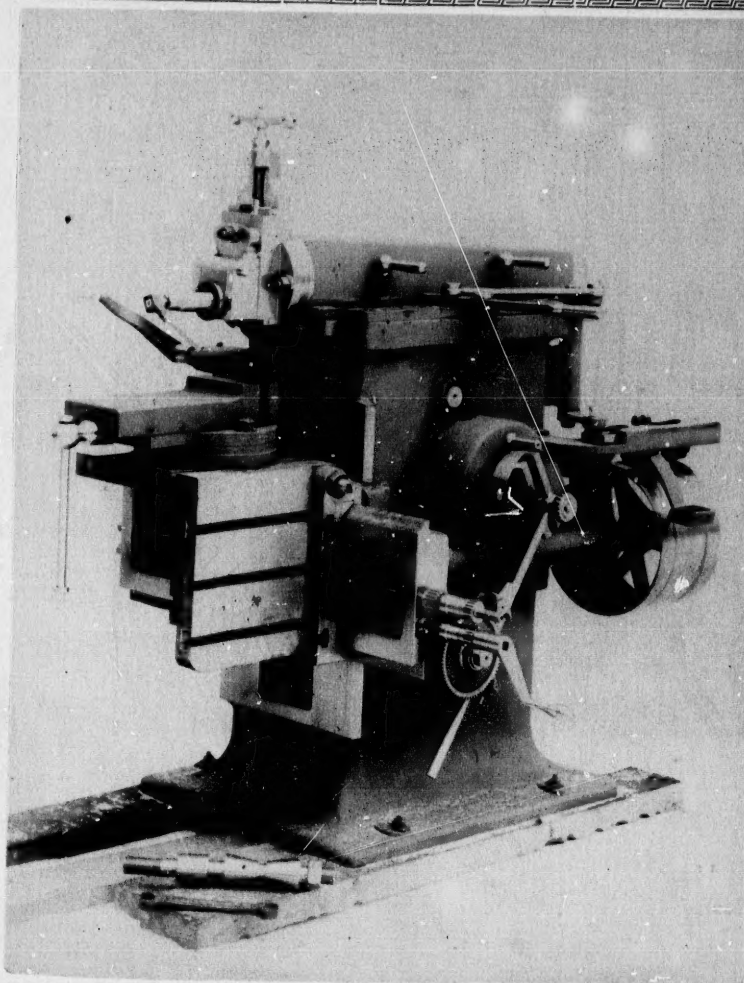
JOHN BERTRAM & SONS

DUNDAS, ONT., CANADA.

Builders of Machinists' Tools and Wood Working Machinery

—FOR—

Railroad, Locomotive and Car Shops, Machine Shops, Rolling Mills,
Steam Forges, Ship Yards, Boiler Shops, &c.



15 INCH SHAPER.

1889

Greatest length of stroke 18 inches, vertical adjustment of table 16 inches, and a cross motion of 23 inches. The tool block has an automatic feed of 5 inches in all directions:

The frame consists of a hollow column, the bottom of which can be used as a tool box. The part of the frame below the ram is cored out so as to allow a 3 inch shaft to pass clear through. By this means a key way can be cut on any part of the shaft.

The table is hinged to the top of the slide block, and is adjustable for planing taper work.

The cross head is gibbed to the frame, and is raised or lowered by the crank shown on the opposite side of the machine.

The driving motion consists of a set of accurately machine cut tangent gearing, driven by an open and cross belt, running at a high velocity. By this practically a positive and uniform motion is given to the ram.

The ram is adjustable to any length of stroke while in motion, or can be stopped in any position without stopping the countershaft.

A countershaft, set of wrenches, vise and mandril for circular feed, are furnished with the machine. Weight complete, 2000 lbs.